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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

10/673,451 09/30/2003 Chikashi Okamoto 2004

7590 04/07/2004 EXAMINER

MATTINGLY, STANGER & MALUR, P.C. LEE, DIANE I

MATTINGLY, STANGER & MALUR, P.C. Suite 370
1800 Diagonal Road
Alexandria, VA 22314

ART UNIT PAPER NUMBER
2876

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s) OKAMOTO ET AL.	
	10/673,451		
Office Action Summary	Examiner	Art Unit	
	D. I. Lee	2876	A. D. C.
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence ad	dress
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be to ly within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS fro e, cause the application to become ABANDON	timely filed ays will be considered timely m the mailing date of this co IED (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on 30 S 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under the second sec	s action is non-final. ince except for formal matters, p		merits is
Disposition of Claims			
4) ☐ Claim(s) 1 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or			
Application Papers			
9)☑ The specification is objected to by the Examine 10)☑ The drawing(s) filed on 30 September 2003 is/ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Examine	fare: a) \boxtimes accepted or b) \square objection of the drawing (s) be held in abeyance. So the drawing (s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CF	FR 1.121(d).
Priority under 35 U.S.C. § 119			
a) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applica nity documents have been receiv u (PCT Rule 17.2(a)).	ition No. <u>09/857,271</u> ved in this National s	-
Attachment(s)			
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9/30/03.	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:	y (PTO-413) Date Patent Application (PTO)-152)

DETAILED ACTION

1. Receipt is acknowledged of the Amendment filed.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/857,271, filed on 27 November 2001.

Drawings

3. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

- 4. The abstract of the disclosure is objected to because of the following(s):
 - (a) Line 3: "or in" should be deleted; and
 - (b) Line 5: delete extra spaces. Correction is required. See MPEP § 608.01(b).

Claim Objections

- 5. Claim 1 is objected to because of the following informalities:
- (a) Re claim 1, line 1: the phrase "such as" should be excluded in the claim because the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d);

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(b) Re claim 1, line 2" the phrase "or the like" should be excluded in the claim because the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d);

- (c) Re claim 1, line 3: "or in" should be deleted; and
- (d) Re claim 1, lines 10-11" "the information" should be changed to --said encrypted visible information--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are:
- (a) a step of obtaining (e.g., reading or scanning) the visible information of said sheet is required prior to encrypting the visible information of said sheet and storing the encrypted visible information in said electronic circuit chip. Since an encryption algorithm involves a transformation of data into a code or cipher to prevent any unauthorized access, a step of obtaining or acquiring a data to be encrypted, such as reading or scanning the visible information of said sheet initially; and
- (b) a step of converting the visible information into electrical data prior to the step of determining discriminatively authenticity of said sheet on the basis of <u>visible information of the sheet</u> (i.e., actual data appear on the sheet, which is non electronic information) and <u>the information stored in</u>

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said electronic circuit chip (i.e., encrypted visible information of the sheet, which is a digital data). In order to determine discriminatively authenticate the sheet of the above <u>visible information of the sheet</u> (i.e., actual data appear on the sheet, which is non electronic information) and <u>the information stored in said electronic circuit chip</u> (i.e., encrypted visible information of the sheet, which is a digital data), the <u>visible information of the sheet</u> (i.e., actual data appear on the sheet, which is non electronic information) would have to be converted to the electrical data (e.g., capturing step).

Appropriate correction and clarification is required

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 10. Claim 1 (as best understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshino et al. [US 5,601,931-referred as Hoshino-cited by the applicant] in view of Hiroya et al. [US 5,754,654-referred as Hiroya, cited by the applicant].

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Hoshino discloses a method of checking sheet (i.e., a document 1 which serves as applicant's claimed sheets) as to forgery thereof, said sheet being provided with an optical code 6 (i.e., magnetic strip or a bar code) from in which information can be read out or written and having visible information (i.e., a predetermined indication data 17 such as figures, characters, symbols, etc.), comprising the steps of:

encrypting the visible information of said sheet and storing the encrypted visible information in the optical code 6 (se col. 10, lines 15+), and

determining discriminatively authenticity of the sheet on the basis of the visible information of the sheet and the information stored in the optical code (see col. 14, lines 14+).

Hoshino does not teach the sheet having an electronic circuit chip for storing the information.

Hiroya discloses a sheet having an electronic circuit chip for storing the information (see the abstract and figure 3-4).

One of ordinary skill in the art would not have been motivated to substitute an electronic storage (i.e., an electronic circuit chip) with the optical storage in order to provide a greater storage capacity in the sheet. Furthermore, utilizing the electronic circuit chip as information storage would have increases the security and provided more reliable data storage. Accordingly, it would have been an obvious expedient.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,659,353 [referred as Patent'353]. Although the conflicting claims are not identical, they are not patentably distinct from each other because Patent'353 discloses all the claimed limitation, for example:

Patent'353 teaches a method of checking sheets as to forgery thereof, said sheet being provided with an electronic circuit chip from or in which information can be read out or written and having visible information (see claim 1, line1-5), comprising the steps of:

encrypting the visible information of said sheet and storing the encrypted visible information in said electronic circuit chip (see claim 1, lines 5-8 and claim 2), and

determining discriminatively authenticity of said sheet on the basis of the visible information of said sheet and the information stored in said electronic circuit chip (see claim 1, lines 15-20 and claim 2.

In view of above discussions, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to use the teachings of claims 1-2 of Patent'353 as a general teachings for checking sheets to forgery as claimed by the present application. The instant claim obviously encompass the claimed invention of Patent'353 and broader in scope.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Eliiott et al. [US 4,961,142] and Kawana [US 4,746,788] discloses a method of encrypting the card data and stored onto the card;

Nerlikar [US 5,629,981] discloses an information management system having a RFID transponder badge interrogating with RF reader; and

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Daggar [US 5,748,737] and Gnadinger et al. [US 6,268,796] discloses a card having an electronic circuit chip.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. I. Lee whose telephone number is (571) 272-2399. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. I. Lee
Primary Examiner

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D. L.